

June 5, 2009 (2:43pm)

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION
BEFORE THE U.S. NUCLEAR REGULATORY COMMISSIONOFFICE OF SECRETARY
RULEMAKINGS AND
ADJUDICATIONS STAFFIn the matter of
Entergy Corporation
Pilgrim Nuclear Power Station
License Renewal Application

Docket # 50-293

June 4, 2009

POST HEARING DEVELOPMENTS: LEAKS OF CONTAMINATED WATER FROM
BURIED PIPING AT OYSTER CREEK & INDIAN POINT AS THEY PERTAIN TO
PILGRIM WATCH'S PETITION FOR REVIEW OF LBP-06-848 AND
INTERLOCUTORY DECISIONS

To the Honorable Chairman Jaczko and Members of the Commission:

Post hearing developments at Oyster Creek and Indian Point directly pertain to Pilgrim Watch's Petition for Review of LBP-06-848, Contention 1 now before the Commissioners. These developments include the recent leaks of radioactive contaminated water from buried pipes at both Oyster Creek and Indian Point; and the Honorable Edward J. Markey's letter to the Commissioners expressing his "grave concerns regarding the current inspections regime for buried pipes" and that he finds them "profoundly inadequate to ensure the public health and safety."

These developments were not brought forward by Pilgrim Watch at the Hearing for the simple reason that they had not yet occurred.

1. Oyster Creek: Leaks Of Radioactive Liquid Nine Days After License Renewal

Oyster Creek Nuclear Generating Company's renewed license was issued April 8, 2009. Nine days later (April 17) workers found an elevated level of radioactive tritium (102,000 picocuries from one sample, 5 times higher than the EPA limit for drinking water per liter) from two buried pipes associated with the condensate storage tank. One pipe had a 5/8 of an inch hole in an 8-

inch carbon steel pipe; the other had a 1-inch hole in it.¹ These leaks demonstrate The Inadequacy of NRC's staff safety inspections during the license renewal process and inadequacy of the aging management program for buried components.

According to press reports, NRC's Neil Sheehan reported in an email that Exelon said that they examined one of the two pipes with holes before its operating license was renewed; however it appears the pipe was inspected in a different spot than where the hole was found.² This highlights a fundamental weakness of the Aging Management Program (AMP) that Pilgrim Watch brought forward in Pilgrim's license renewal adjudication.

Exelon stated that underground piping systems carrying radioactive water will be moved above ground or placed in vaults. In other words Exelon admits, after the fact, that there is a problem. Will Pilgrim's buried piping carrying radioactive water be similarly placed above ground or in vaults; or does NRC condone New Jersey citizens being safer than Massachusetts citizens?

The inescapable conclusion from these leaks is as follows.

(A) The pipes leaked nine days into the twenty year license extension. The Oyster Creek Aging Management Program for Buried Pipes was obviously insufficient.

(B) The NRC Staff Safety Review did not identify deficiencies in the buried piping AMP; there is no basis to assume that Pilgrim's SER was any better.

(C) Although the applicant must "demonstrate that the effects of aging will be adequately managed so that the intended function(s) will be maintained consistent with the CLB for the period of extended operation;" the definition of those intended functions is too limited. The Applicant, NRC Staff and the ASLB maintained in Pilgrim's License Renewal that the intended function of buried components does not include containment of radioactive liquids to prevent leaks, such as at Oyster Creek of unmonitored radioactivity into the environment.

¹ Brick Township Bulletin, *Holes in two pipes thought to be source of tritium leaks*, Patricia Miller, May 7, 2009

² Cherry Hill Courier Post, *Only one leaking Oyster Creek pipe inspected*, Todd Bates, May 2, 2009

Does the Commission support this astounding assertion? Can the Commissioners seriously tell the public that the unmonitored leakage of radioactive liquids from components is so unimportant that it does not care whether there is reasonable assurance that the AMP will prevent them?

2. Indian Point: Leaks of Radioactive Liquid; License Application Currently Under Review

On April 30, 2009 the Honorable Edward Markey, Chairman of the Subcommittee on Energy and the Environment and the Honorable John J. Hall, Member of Congress, wrote to the Commission about the leak at Indian Point.³ On February 16, 2009, again after the close of the Pilgrim Hearing, Entergy determined that a buried section of the Unit 2 condensate storage tank (CST) return line leaked water at a rate of approximately 18 gallons per minute. Entergy determined that a 1.5 inch diameter corrosion hole was the source of the leak. All told, 100,000 gallons had leaked.

James Sheets, a spokesman for Entergy, said that the pipe that broke was made of carbon steel covered with a protective coating and external corrosion caused the rupture.⁴

Lessons learned from Indian Point

A. Carbon steel, like all metals, corrodes. Protective coating corrodes, is defective or becomes damaged. External corrosion caused the rupture at Indian Point. Chemistry control that targets interior surfaces provides no guarantee that pipes shall maintain their integrity. All of these issues were raised by Pilgrim Watch. Indian point shows their importance.

B. The corroded pipe at Indian Point adds to the long and growing list of pipe leaks around the county. Leaks of water with radioactivity have been discovered in underground piping, for

³ Their letter is attached; the Commission has yet to respond.

⁴ New York Times, *Indian Pt. Broken Pipe Spurs Safety Worries*, Annie Correal, February 28, 2009

example, at Byron, Braidwood, Dresden, Palo Verde, Indian Point, and Oyster Creek. Tritium was discovered in monitoring wells at Pilgrim.

C. Representative Markey said in his letter to then-Chairman Klein that the leak raised serious questions about Entergy's and the regulatory commission's oversight. "This leak may demonstrate a systemic failure of the licensee and the commission to inspect critical buried pipes in a manner sufficient to guarantee the public health and safety." He noted that physically inspecting buried piping systems poses unique challenges due to limited accessibility. However, he noted that many industries have successfully developed technologies and programs to deal with this problem. Congressman Markey concluded his letter by asking "Has the Commission ever considered requiring licensees to develop technologies and methods to inspect difficult to access buried pipes? If so, why are such requirements not in place?"

Pilgrim Watch's testimony at the Pilgrim hearing specifically answered Congressman Markey's question. There are technologies and programs available to supplement the AMP to make it sufficient – backfit cathodic protection, require a robust inspection protocol, install a sufficient number of monitoring wells, and perform a baseline inspection prior to license renewal so that there is a benchmark of conditions to measure the rate of corrosion going forward.

The post-hearing leaks of radioactive liquid at Oyster Creek and Indian Point support Pilgrim Watch's position that leaving leakage of unmonitored quantities of radioactive liquids out of the licensing procedure and subject only to some industry voluntary program, is an abdication of NRC's responsibility to protect the public from unmonitored radioactive exposure and is contrary to NRC's ALARA principle.

Thank-you for your consideration, I am sincerely,

A handwritten signature in cursive script that reads "Mary Lampert". The signature is written in black ink and is positioned above the typed name.

Mary Lampert, pro se

Pilgrim Watch

148 Washington Street

Duxbury, MA 02332

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NUCLEAR REGULATORY COMMISSION

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In the Matter of

Docket # 50-293-LR

Entergy Corporation

Pilgrim Nuclear Power Station

License Renewal Application

June 4, 2009

CERTIFICATE OF SERVICE

I hereby certify that the following was served June 4, 2009, Post Hearing Developments: Leaks of Contaminated Water From Buried Piping at Oyster Creek & Indian Point As They Pertain To Pilgrim Watch's Petition For Review Of LBP-06-848 and Interlocutory Decisions

Secretary of the Commission
Attn: Rulemakings and Adjudications
Staff
Mail Stop 0-16 C1
United States Nuclear Regulatory
Commission [2 copies]

Hon. Gregory B. Jaczko
Chairman
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Hon. Peter B. Lyons
Commissioner
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Hon. Dale E. Kline
Commissioner
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Hon. Kristine L. Svinicki
Commissioner
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Administrative Judge
Ann Marshall Young, Chair
Atomic Safety and Licensing Board
Mail Stop – T-3 F23
US NRC
Washington, DC 20555-0001

Administrative Judge
Paul B. Abramson
Atomic Safety and Licensing Board
Mail Stop T-3 F23
US NRC
Washington, DC 20555-0001

Administrative Judge
Richard F. Cole
Atomic Safety and Licensing Board
Mail Stop -T-3-F23
US NRC
Washington, DC 20555-0001

Office of Commission Appellate
Adjudication
Mail Stop 0-16 C1
United States Nuclear Regulatory
Commission
Washington, DC 20555-0001

Atomic Safety and Licensing Board
Mail Stop T-3 F23
United States Nuclear Regulatory
Commission
Washington, DC 20555-0001

Susan L. Uttal, Esq.
James E. Adler, Esq.
Marcia Simon, Esq.
Andrea Jones, Esq.
United States Nuclear Regulatory
Commission
Washington, DC 20555-0001

Office of General Counsel
Mail Stop - O-15 D21
United States Nuclear Regulatory
Commission
Washington, DC 20555-0001

Paul A. Gaukler, Esq.
David R. Lewis, Esq.
Pillsbury, Winthrop, Shaw, Pittman,
LLP
2300 N Street, N.W.
Washington, DC 20037-1138

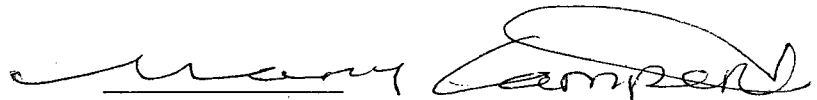
Martha Coakley, Attorney General
Matthew Brock, Assistant Attorney
General Commonwealth of
Massachusetts
Office of Attorney General
One Ashburton Place
Boston, MA 02108

Mr. Mark Sylvia
Town Manager, Town of Plymouth
11 Lincoln Street
Plymouth MA 02360

Sheila Slocum Hollis, Esq.
Town of Plymouth MA
Duane Morris, LLP
505 9th Street, N.W. 1000
Washington D.C. 20004-2166

Richard R. MacDonald
Town Manager, Town of Duxbury
878 Tremont Street
Duxbury, MA 02332

Fire Chief & Director DEMA,
Town of Duxbury
688 Tremont Street
P.O. Box 2824
Duxbury, MA 02331



Mary Lampert
Pilgrim Watch, pro se
148 Washington St.
Duxbury, MA 023332